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ABSTRACT

School motivation and achievement for an individual is the product of a complex set of interacting goals, goals which may be more or less significant to individuals from different cultural backgrounds. This paper describes a project which examines the nature of goals held by students from different cultural groups, the compatibility of these goals with goals promoted by classrooms and schools, and the impact these goals have on student achievement, motivation, and school retention. It is argued that ethnic minority children hold values and goals compatible with effective school learning within western school settings, but that many fail to be effectively socialized by the school and their community as effective learners within that setting. Participants in this study were drawn from 12 high schools in New South Wales; a large high school on a Navajo Reservation in the United States; and a small rural school, roughly equivalent to a high school, on the Betsiamite Reservation in Canada. Attachments include items comprising scales drawn from Confirmatory Factor Analyses of the Inventory of School Motivation, an instrument used in the study; a table of predictor variables, and an Interview Schedule. (Contains 37 references.) (Author/MAH)

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Schools, socialization, and the goals of schooling: What counts in classrooms characterized by cultural diversity.

A cross-national study.

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A paper presented at the Annual Meeting of the American Educational Research Association, New York, April 8-12, 1996

Abstract

School motivation and achievement for an individual is the product of a complex set of interacting goals, and these goals may be differentially salient to individuals from different cultural backgrounds. This paper describes a project designed to examine the nature of goals held by students from different cultural groups; the compatability of these goals with goals promoted by classrooms and schools, and the impact these goals have on student achievement, motivation and school retention.

It is argued in our paper that ethnic minority children hold values and goals that are compatible with effective school learning within western school settings, but that many fail to be effectively socialized by the school and their community as effective learners within that setting.

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The goal theory of achievement motivation argues that the goals stressed by schools have dramatic consequences for whether children develop a sense of efficacy and a willingness to try hard and take on challenges, or whether they avoid challenging tasks, giving up when faced with failure (See Ames, 1984, 1992; Covington, 1992; Elliott & Dweck, 1988; McInerney & McInerney, 1994; Maehr, 1989; Maehr & Midgley, 1991).

Goals are cognitive representations of the different purposes that students may have in different achievement situations, and are presumed to guide students' behaviour, cognition, and affect as they become involved in academic work (Ames, 1992; Dweck & Elliott, 1983; Pintrich, Marx & Boyle, 1993; Wentzel, 1991). Two goals have received considerable attention from researchers: **mastery goals** (also called learning goals), and **performance goals** (also called extrinsic goals). Central to a mastery goal is the belief that effort leads to success, and the focus of attention is on the intrinsic value of learning. Mastery goals and their achievement are "self-referenced". In contrast, central to a performance goal is a focus on one's ability and sense of self-worth. Ability is shown by doing better than others, by surpassing norms, or by achieving success with little effort. Public recognition for doing better than others through grades, rewards and approval from others, is an important element of performance goal orientation. Performance goals and achievement are, therefore,"other referenced". Implicit in both mastery and performance goals is a focus on individualism where priority is given to the goals of individuals. Such an approach is very much tied to a "Western" conception of what are the appropriate goals of schooling. There is little attention paid to other goals such as working to preserve in-group integrity, interdependence of members and harmonious relationships which may be more salient to students from non-Western cultural backgrounds such as Aboriginal, Navajo and Asian (Kagitcibasi & Berry, 1989; Triandis et al, 1993; Schwartz, 1990). Furthermore, the bipolar mastery versus performance continuum, while giving us valuable insights into some aspects of the motivational process and the ways in which schools may emphasise one or other of these two goal structures, suggests that these goals are mutually exclusive. Recent theorising and research, however, suggest that these are not dichotomous and that individuals may hold both mastery and performance goals, varying in salience, depending on the nature of the task, the school environment and the broader social and educational context of the institution (see e.g., Meece, 1991; Pintrich & Garcia, 1991; Wentzel, 1991). Students may also hold multiple goals such as a desire to please one's parents, to be important in the peer group, or to preserve one's cultural identity, each of which may impact upon their level of motivation for particular tasks in school settings. Indeed, these multiple goals interact providing a complex framework of motivational determinants of action. (see Blumenfeld, 1992; McInerney, 1988abc, 1989ab, 1994ab, 1995; McInerney & Sinclair, 1991; McInerney & Swisher, 1995; Pintrich & Schrauben, 1992; Urdan & Maehr, 1995). **A mismatch between goal orientations supported by teachers and schools, and the goal orientations held by students developed through socialization practices within families and cultural communities, will have significant implications for student motivation, absenteeism, achievement and retention.**

Educational implications

For many children within multicultural societies the language of the home is not English, and the culture of the home often strongly reflects the parents' culture of origin. Consequently, many of these children are brought up in a culturally different environment until they first go to school. Currently, however, little is known about the range of goals that students from various cultural backgrounds hold, and which of these are most salient within school settings. The literature posits a number of opposing values and goals of children coming from Western societies and those coming from non-Western indigenous societies. It is believed, for example, that individuals within Western societies are competitive, seek power and control over others and are desirous of individual success through achieving personal goals. In contrast, it is believed that individuals within non-Western indigenous societies are affiliation oriented and motivated by cooperation and social concern. Group needs are considered more important than individual needs and therefore indigenous people eschew competitiveness and individual striving for success. It is also believed that individuals from indigenous societies are strongly present and past oriented while members of Western societies are future-time oriented, and therefore plan for the future and how to get ahead. Consequently it is believed that members of indigenous societies are more motivated by present rewards, such as token reinforcement, than individuals from modern Western societies who can delay immediate rewards to achieve long term goals. Furthermore, it is proposed that Western style schools, which emphasise individual mastery and performance goals (reflected in competitiveness and individualism), are poorly suited to children from

indigenous societies who, because of economic disadvantage and poor academic achievement, are likely to have poorer self esteem within the school context, poorer school confidence, and see little purpose in completing school (see Graham, 1994). Many of these beliefs are intuitive with very little empirical bases. Previous studies conducted in laboratory and in field settings have provided important information about the antecedents and consequences of mastery and performance goals and their potential impact on how individuals invest their energy in any course of action. However, these studies have tended to be cross-sectional, small scale, and too narrowly focussed. Little attempt has been made to situate the theoretical framework within broader cultural contexts, and little attempt has been made to widen the focus from mastery and performance goals. As the present study seeks to examine the applicability of goal theory to a number of cultural groups, and widens the focus to encompass a range of potentially culturally relevant goals, it makes a **significant contribution** to both theoretical and applied literature in this area internationally.

The purpose of this research is to answer the following questions:

1. **Are the dimensions of a model reflecting goal theory relevant to range of cultural groups?**

2. **What are the most important goals of motivation derived from this model?**

3. **What are the implications of alternative goals held by different cultural groups to such important criteria of school motivation such as grades, absenteeism, and desired occupation?**

In order to examine whether there were any discrepancies between the goals presented on the psychometric survey form and goals held by the communities surveyed, and to triangulate results, a second stage of the study was conducted through open ended surveys and interviews. The following issues were examined:

1. **What is the nature of goals held by students from different cultural groups?**

2. **How compatible are these goals with those promoted within classrooms and schools?**

3. **What is the relative impact on student achievement and motivation of the goals held by the individual, the peer group, the family, and the school.**

Methodology

Participants

The Australian sample was drawn from 12 high schools in New South Wales. Five schools were selected from educational regions within Sydney, and 7 were drawn from rural regions. From these schools the following samples were drawn: (a) all Aboriginal students (male and female) from Years 7,8,9,10 and 11 (n=496); (b) a stratified random sample of approximately 25 students (male and female) chosen from class lists from each Year 7,8,9, and 11 at each school (n=706); and the entire Year 10 group of students at each school (except two regional schools where a random sample was drawn owing to the very large size of the classes) (n=953). Non-Aboriginal children were classified as Anglo or immigrant. The basis of the classification "immigrant background" was whether one or more parents of the subject had been born overseas. There were 487 children of immigrant background and 1,173 Anglo children. There were approximately equal numbers of males and females across each group and across each grade.

The Navajo sample was drawn from Window Rock High School, a large high school situated on the Navajo Reservation. Five hundred and twenty nine students from Grade 9 through to Grade 12 were surveyed (approximately 7.4% of the sample listed multiple tribes or other tribes as their tribal affiliation). There were approximately equal numbers of male and female students. Ninety-one percent of the students lived on the Reservation (with 61% living in a village and 30% on rural properties). Nineteen percent of the subjects spoke their native language exclusively at home, 5% spoke their native language and English, while the remainder spoke English exclusively at home.

The Montagnais Betsiamite Indian subjects were drawn from Ecole Secondaire Uashkaikan, Quebec, a small rural school located on the Betsiamite Reservation. One

hundred and ninety eight students were surveyed from Grade 7 through to Grade 12 comprising almost the entire school population. There were approximately equal numbers of male and female students.

The demographic information obtained on the three indigenous minority groups (Australian Aboriginal, Navajo, and Montagnais Betsiamites) indicate very similar patterns of socio-economic status, high levels of unemployment, and high school drop-out. The Betsiamites sample represents the most isolated from mainstream experiences of the three indigenous groups. The anglo Australian and immigrant Australian groups were drawn from schools in low socioeconomic areas and, as such, had very similar proportions of families classified as occupying semi-skilled, unskilled and pensioner statuses as the Aboriginal students drawn from these same schools. However, there were larger proportions of non-Aboriginal families represented in the higher socioeconomic professional and clerical and sales occupations.

The grade levels selected are broadly equivalent across the groups, that is, high school grades (although the United States sample did not include grades 7 and 8). Each of the schools follows, by and large, mainstream state prescribed curriculum.

Instruments

The **Inventory of School Motivation** (ISM), utilized in this research, was devised to reflect components of Maehr's Personal Investment model and to investigate the nature of school motivation in cross cultural settings (McInerney, 1988b, McInerney & Sinclair, 1991, 1992). The Inventory is broad enough to reflect the global dimensions of the model in a variety of cultural settings. Inventory questions relate to the following goals of the Personal Investment Model, each of which has two components: **Task**: task involvement (e.g., the more interesting the school work the harder I try), and striving for excellence (e.g, I try hard to make sure that I am good at my schoolwork); **Ego**: competitiveness (e.g., winning is important to me), group leadership (e.g., I often try to be the leader of a group); **Social Solidarity**: social concern (e.g., it is very important for students to help each other at school), affiliation (e.g., I try to work with friends as much as possible at school); **Extrinsic**: recognition (e.g., having other people tell me that I did well is important to me), token rewards (e.g., getting merit certificates would make me work harder at school). Responses were recorded on a Likert-type scale from strongly agree (1) to strongly disagree (5). The final items comprising the Inventory are presented in Table 1.

Qualitative survey and interview data were used to give verisimilitude to the quantitative findings. These qualitative data are currently being analysed. The interview schedule is presented in appendix 1.

Analyses and Results

From the psychometric perspective, exploratory and confirmatory factor analyses of the Inventory of School Motivation have offered considerable empirical support to the validity and utility of the Inventory of School Motivation in cross cultural situations (reported in McInerney, 1995; McInerney & Swisher, 1995; McInerney, McInerney & Roche, 1994; McInerney & Sinclair, 1991, 1992.

In order to investigate the relevance of the goals drawn from the Inventory of School Motivation to a range of school achievement criteria (viz., desired occupation after leaving school, elicited from the students at the time of the survey and graded on a six point scale based upon the occupational prestige of the nominated occupation; English and Maths achievement (Aboriginal, anglo Australian, immigrant Australian and Betsiamite students) and Grade Point Average (Navajo Students) drawn from school records; and, days absence for the enrolment period in which the survey was conducted, drawn from school records), a series of multiple regression analyses were conducted. The results of these analyses are presented in Table 2. Clearly, the results demonstrate that the ISM is very effective in explaining variation in school performance criteria for the five groups. The ISM responses were able to explain high levels of variance in Maths achievement, English achievement, desired occupation, and affect to school. The ISM was able to explain a significant, but modest, level of variance in attendance.

The overwhelming impression from the analyses above is that the significant predictors appear to be consistent across a variety of criteria **within** each cultural group, and that these key predictors are also consistent **across** the groups. To examine the patterns of similarity and difference of the multiple regression equations across the five groups more closely Table 3 was designed to compare across the groups within each criteria. The table is

based on the size of the standardised beta weights for each variable within each multiple regression equation, i.e., the largest beta weight was numbered 1, the second largest 2, and so on within each equation. While strictly speaking beta weights do not represent, in any absolute sense, the relative importance of the variables (because they are contingent on the other independent variables in the equation and may be affected by the correlations of the independent variables) they do give some point of comparison between the multiple regression equations within and across groups. Two features are worth noting, first, the number of significant predictor variables and second, their relative importance (indicated by their number) in explaining particular criteria across the groups.

A glance across and down the columns in Tables 2 and 3 indicates which predictor scales are repeatedly significant across a range of criterion scales for each of the groups. Clearly significant predictors for each group are self esteem and sense of purpose. Token reinforcement, social concern and task effort are also significant predictors for each of the groups. A surprising finding was the lack of significant relationship between educational criteria considered in this research and a number of variables which are suggested in the literature as being important, viz., affiliation, power, sense of competence, recognition and competition. If there had been the expected differences between the Western and indigenous groups in the salience of the full range of predictors, these should have been apparent in the multiple regression equations. It appears therefore from our analyses that the groups are more similar than different, and that the same range of predictors are significant (or not significant) across the groups.

One caveat to the position put forward here is the possibility that the scales may not capture the "cultural essence" of these dimensions for the indigenous groups. For example, what we have called affiliation may be constructed on Western notions of affiliation rather than capturing indigenous affiliation values. To examine this issue qualitative work has been conducted with the Aboriginal and Navajo groups and data are currently being analysed. Preliminary work indicates that these dimensions, as defined by the items, are perceived by respondents as culturally relevant. These preliminary analyses also suggest that the important goals emerging from the psychometric analyses are also implicated as the important variables distinguishing between motivated, successful students in the interviews.

Insert Tables 2 and 3 about here

Summary and conclusion

Our study has demonstrated the use of the Inventory of School Motivation in cross cultural contexts. It has enabled us to describe the motivational characteristics of a range of diverse cultural groups in terms of achievement goal theory, and to explain group variance in a range of important educational criteria.

Our findings suggest that the motivational profiles of the diverse groups are more similar than different; that a narrow range of goals and sense of self variables are important in explaining school achievement on educational criteria, and these are similar across the groups; and that key variables used to distinguish Western and indigenous groups do not appear to be salient in the school contexts studied here. Further studies will examine within groups differences and relate these to criteria of school success.

The results indicating the salience of sense of purpose, self esteem, task effort and token reinforcement to school achievement for the indigenous minority students in this study begs the question as to whether academic achievement could be enhanced in other, more culturally appropriate ways (e.g., by developing learning structures that are more consonant with cultural values). However, the strength of this argument would be enhanced if there had been different patterns of relationship demonstrated between the Western and indigenous groups on the multiple regression analyses. In the meantime, the findings clearly indicate that some children are more effectively socialized into what it means to be a student in Western schools than others from the indigenous minority groups considered in this research. Many of the successful indigenous minority children appear to operate effectively at school while also maintaining strong cultural identity and values.

It would appear from this that the motivational goals influencing school performance are related to a child's perception of his or her role as a student within a school setting, rather than being related to specific cultural values, which may be relatively unimportant in a school setting. As such, the research illustrates the point made by Fuller and Clark (1994), while discussing what makes an effective school in culturally diverse communities, that a strong socialization agenda is wrapped around the task of raising cognitive achievement in schools. Obviously, however, given the poor academic achievement, attendance and school retention

of indigenous minority children generally, many of these children are not effectively socialized into what it means to be a school student within the existing school framework. Tinto (1987) suggests that the background characteristics and goal commitments of minority students appear to influence not only how they perform at school, but also how they interact with, and subsequently become integrated into, the school's social and academic systems. Using Tinto's idea, that in the final analysis it is the individual's integration into the academic and social systems that most directly relates to his or her academic achievement and continuance with school, it might be more valuable for educators to examine ways in which they can socialize students into the role of being a student within existing schools, rather than seeking to "indigenize" schools. The research, therefore, has implications for the way in which schools characterised by ethnic diversity socialize students from ethnic minority groups into the "school culture" and all this implies in terms of the nature of the tasks set, the valuing of individualistic or cooperative work, setting of goals, acquiring attitudes to school work, and the distribution of rewards.

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Table 1 Items comprising scales drawn from Confirmatory Factor Analyses of the Inventory of School Motivation

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Task-effort (tas)

I try hard at school because I am interested in my work
I need to know that I am getting somewhere with my schoolwork
I try hard to make sure that I am good at my schoolwork
I like to see that I am improving in my schoolwork
I work hard to try to understand something new at school
When I am improving in my schoolwork I try even harder
I am always trying to do better in my school work

Competition (com)
I want to do well at school to be better than my classmates
Winning is important to me
I am happy only when I am one of the best in class
Coming first is very important to me
I work harder if I'm trying to be better than others

Power (pow)
I often try to be the leader of a group
I work hard because I want to feel important in front of my school friends
It is very important for me to be a group leader
I work hard because I want the class to take notice of me
I work hard at school so that I will be put in charge of things

Affiliation (afl)
I like working with other people at school
I can do my best work at school when I am working with others
I try to work with friends as much as possible at school
When I work in groups at school I don't do my best*

Social concern (soc)
It is very important for students to help each other at school
I like to help other students do well at school
I care about other people at school
I enjoy helping others with their schoolwork even if I don't do so well myself
It makes me unhappy if my friends aren't doing well at school

Recognition (rec)
I try to do well at school to please my teachers
Having other people tell me that I did well is important to me
Praise from my teachers for my good schoolwork is important to me
Praise from my friends for good schoolwork is important to me
I like to be encouraged for my schoolwork
At school I work best when I am praised
I want to be praised for my good schoolwork
Praise from my parents for good schoolwork is important to me

Token (tok)
I work hard at school for rewards from the teacher
I work best in class when I can get some kind of reward
I work hard at school for presents from my parents
Getting merit certificates would make me work harder at school
Getting good marks is everything for me at school

Sense of Purpose (sop)
I want to do well at school to show that I can do it
I want to do well at school so that I can have a good future
I aim my schooling towards getting a good job
I try hard to do well at school so I can get a good job when I leave
I work hard at school so that I can go on to (the final year)
It is good for me to plan ahead so I can do well at school
It is good to plan ahead to complete my schooling

Sense of Competence (sec)
I often try new things on my own
I like to think things out for myself at school
Most of the time I feel that I can do my schoolwork
I don't need anyone to tell me to work hard at school; I do it myself
I am very confident at school
Other students have to help me a lot with my work*
If I'm working alone, difficult schoolwork doesn't bother me
I always choose easy work for myself to do at school so that I don't have too much trouble*

Self Esteem (est)
I am always getting into trouble at school*
I usually do the wrong things at school*
I can do things as well as most people at school
I am bright enough to continue my schooling to the (final year) of schooling
On the whole I am pleased with myself at school
I think I can do quite well at school
I succeed at whatever I do at school
I think that I am as good as everbody else at school

Note:

* Negatively worded items were reverse scored

The scale used consisted of five points:
1. strongly agree, 2. agree, 3. not sure, 4. disagree, 5. strongly disagree

Table 2 Sets of beta weights and multiple correlation coefficients for each sample (anglo Australian, immigrant Australian, Aboriginal Australian, Navajo Indian, Betsiamite Indian) drawn from the Inventory of School Motivation.

	PREDICTOR VARIABLES													
Criterion	Est	Afl	Pow	Soc	Tok	Sop	Sec	Rec	Com	Tas	MultR	R^2	F	DF
Anglo														
Maths Achievement (Yr 10)	.390**	.015[a]	.064	.046	.292**	.256**	.019	.110*	.020	.206**	.495**	.244	20.33	10/628
English Achievement (Yr 10)	.423**	.090*	.121**	.132**	.193**	.242**	.071	.152**	.050	.188**	.521**	.271	23.23	10/625
Attendance	.015	.032	.037	.039	.016	.116*	.022	.003	.031	.060	.095	.009	1.01	10/1102
Desired Occupation	.142**	.022	.047	.027	.058	.205**	.025	.034	.046	.035	.273**	.074	9.06	10/1128
Immigrant														
Maths Achievement (Yr 10)	.325**	.096	.059	.153*	.150[b]	.199*	.032	.122	.010	.273**	.404**	.163	5.10	10/262
English Achievement (Yr 10)	.325**	.166**	.120	.089	.195*	.184*	.064	.192*	.156[b]	.251*	.448*	.201	6.47	10/257
Attendance	.015	.020	.071	.098	.039	.173*	.006	.041	.090	.036	.203*	.041	1.85	10/434
Desired Occupation	.231**	.040	.013	.019	.098	.292**	.026	.002	.058	.146*	.328**	.108	5.61	10/464
Aboriginal														
Maths Achievement (Yr 10)	.389*	.075	.092	.079	.312*	.114	.068	.144	.126	.209	.503*	.253	2.24	10/66
English Achievement (Yr 10)	.358*	.038	.233	.262	.345**	.271[b]	.009	.073	.173	.257	.676**	.456	5.54	10/66
Attendance	.079	.035	.037	.023	.112	.132	.088	.159**	.110	.046	.254**	.065	2.72	10/395
Desired Occupation	.003	.035	.114*	.097	.108	.248**	.102	.011	.098	.049	.347**	.121	6.38	10/466
Navajo														
Grade Point Average	.298**	.037	.003	.023	.125[b]	.183**	.089	.076	.014	.065	.428**	.183	8.43	10/377
Attendance	.246**	.003	.047	.074	.116	.046	.028	.144*	.066	.016	.275**	.076	3.34	10/407
Desired Occupation	.096	.010	.102	.002	.023	.273**	.108[b]	.028	.089	.120	.320**	.101	4.16	10/365
Betsiamite														
Maths Achievement	.163	.046	.024	.182[b]	.077	.260*	.151	.053	.009	.084	.350*	.123	2.17	10/155
English Achievement	.159	.067	.006	.077	.222[b]	.416**	.092	.007	.184	.259*	.381*	.145	1.90	10/112
Attendance	.297**	.074	.065	.041	.120	.068	.312**	.097	.193*	.028	.334*	.111	2.33	10/186
Desired Occupation	.051	.120	.039	.233*	.241*	.129	.139	.102	.032	.224[b]	.351*	.123	2.06	10/146

Note:

[a] Negative beta weights are underlined

[b] Approached significance at the .05 level

* p<.05 ** p<.01

Est: Self Esteem
Afl: Affiliation
Pow: Power
Soc: Social Concern
Tok: Token Reinforcement
Sop: Sense of Purpose
Sec: Sense of Competence
Rec: Recognition
Com: Competition
Tas: Task Effort

Table 3 Order of importance of standardized beta weights across five cultural groups.

	PREDICTOR VARIABLES									
Criterion	**Est**	**Afl**	**Pow**	**Soc**	**Tok**	**Sop**	**Sec**	**Rec**	**Com**	**Tas**
Maths Achievement										
Anglo †	1				2	3		5		4
Immigrant †	1			4	5	3				2
Aboriginal †	1				2			4	5	3
Navajo GPA††	1				3	2	4	5		
Betsiamite	3			2		1	4			5
English Achievement										
Anglo †	1				3	2		5		4
Immigrant †	1				3	5		4		2
Aboriginal †	1			4	2	3				5
Navajo (not available)										
Betsiamite	5				3	1			4	2
Attendance										
Anglo						1				2
Immigrant			4	2		1			3	
Aboriginal	5				3	2		1	4	
Navajo	1			4	3			2	5	
Betsiamite	2				4		1	5	3	
Desired Occupation										
Anglo	2		4		3	1			5	
Immigrant	2				4	1			5	3
Aboriginal			2		3	1	4		5	
Navajo	5		4			1	3			2
Betsiamite	5			2	1	5	4			3

Note:

†: Scores only available for Year 10 groups
††: Grade Point Average only was available

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Appendix 1

Interview Schedule.

(Icebreaker)

1. Tell me about school at .... Prompts (as required) A). What is good about it? b). What is not so good about it?

2. Since you have been at school you would have come across some (Navajo) students who are really all fired-up to do well at school, while other students appear to be minimally interested in school and poorly motivated. Why do you think some (Navajo) students are highly motivated at school? Why do you think some (Navajo) students are poorly motivated at school?

Depending on the answers to the above questions the following questions were asked for further elaboration.

3. If a (Navajo) student does well at school and completes school are there any people who have been important in this? What other influences may be important? What are the consequences of doing well at school?

4. If a (Navajo) student does poorly at school are there any people who might have influenced this? What other influences may be important? What are the consequences of doing poorly at school?

The next question was asked to tap-into values and how much the children's values reflected traditional thought and how much they reflected western thought.

5. What do you understand by success in life.

The following questions assess the validity of the dimensions of the ISM for the students concerned.

Preamble: In earlier work I looked at a number of goals that might be related to a (Navajo) student'school motivation. I want you to tell me what you think about each and whether you think they are important for a child to be motivated at school:

Intrinsic motivation - Some students are motivated because they seek excellence in their work, like school-work for its own sake, and like school tasks. Is this important? Tell me how?

Competition - Some students are motivated because they like to be better than others in class, come first, and win competitions. Is this important? Tell me how?

Group leadership - For some students the focus of their activities at school, and why they are motivated, is doing well to be put in charge of groups, to lead team activities. Is this important? Tell me how?

Affiliation - For some students the focus of their activities at school is working with friends, working in groups help them to be motivated. Is this important? Tell me how?

Social Concern - For some students the most important thing is to help others, being concerned for others at school, sometimes disadvantaging themselves while helping others. Is this important? Tell me how?

Recognition - Some students are motivated when they are given feedback from others for their good work. Is this important? Tell me how? From whom should this feedback come?

Token Rewards - Some students are motivated to work for rewards and prizes such as merit certificates, and maybe presents from their parents. Is this important? Tell me how? Have you received and prizes and merit certificates? How did it make you feel? Have you received presents from your parents for your good school work?

I then asked students how much they felt the following characteristics were important to school motivation

Self esteem - How much a student feels good about him/herself as a student (e.g., I am liked at school)
Sense of competence - how much as student feels he/she can do schoolwork
Sense of purpose - planning ahead, valuing school for its utility, knowing why one is at school and what can be achieved through good schooling.

Finally I asked students to suggest which combination of the above goals and sense of self characteristics were most likely characteristics of highly motivated and successful students..